

HALDIMAND-NORFOLK STUDY

SUMMARY:

THRESHOLD OF CHANGE 1-LAND & DEVELOPMENT

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Summary of

THRESHOLD OF CHANGE: (1) LAND AND DEVELOPMENT

Haldimand-Norfolk Study
July, 1972

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Preface

This is a summary of the full report, *Threshold of Change: (1) Land and Development*, submitted to the Minister of Municipal Affairs in 1971.

Some minor changes from the original report have been introduced into this summary to take account of recent events.

The projections and estimates in the original report, however, were based on the assumption that the Steel Company of Canada's Lake Erie Works would be in production by 1975. Possible changes in Stelco's plans, so far as is known, do not warrant any significant modification in these projections and estimates.

It should be emphasized that this report is only a summary. For more detailed background to the recommendations included here, please refer to the main report.

Introduction

Haldimand and Norfolk are two almost entirely rural counties together covering 1,100 square miles on the north shore of Lake Erie. Of a total population of 83,000, only 34,000 live in incorporated towns and villages. The largest urban centre, Simcoe, has a population of less than 11,000. These two counties are now on the threshold of large-scale urban development and industrialization.

In 1967 Ontario Hydro began construction of a thermal generating station in the area. Then in 1968 the Steel Company of Canada announced that it had acquired 6,600 acres on the north shore of Lake Erie, straddling the boundary between the counties, to build a new steel plant and industrial park. In the two years that followed, Texaco announced plans to build a refinery next door to the Hydro site. Forty miles to the west another company had plans that would also affect the Haldimand-Norfolk area: Dominion Foundries and Steel Company was acquiring a site for a steel plant at Port Burwell.

Between the Stelco site and the Hydro and Texaco sites lies the tiny hamlet of Nanticoke, which has given its name to the new industrial complex.

In anticipation of the enormous impact these new industries would have on population and urban development in the area, the Minister of Municipal Affairs, on March 17, 1969, announced the formation of the Haldimand-Norfolk Study. It has been the task of this group to prepare an outline development plan to guide Provincial policies and programmes in the Haldimand-Norfolk area.

This report, therefore, is presented as a foundation of basic development policies to guide and coordinate the individual plans and programmes of Provincial ministries and agencies in Haldimand and Norfolk. Indeed, the report was produced in close cooperation with a number of them, especially the Ministries of Treasury, Economics and Intergovernmental Affairs, Transportation and Communications, and the Environment, and Ontario Hydro and the Ontario Housing Corporation.

Through the work of the Haldimand-Norfolk Joint Study Committee, set up by the two county councils, the opinions and wishes of the area's inhabitants have been taken into consideration also. The committee members have shown an extremely high level of responsibility and far-sightedness in their determination to consider the future of the area as a whole.

The success of the plan presented here depends on its being considered and implemented as a whole. If the recommendations are handled piecemeal or taken out of context, the plan will fail to achieve its purpose of guiding urban and industrial development in an orderly fashion.

The Regional Context

Central southwestern Ontario is experiencing a trend towards large-scale industrial growth. Ford at Talbotville and Dofasco at Port Burwell, as well as Stelco, Texaco and Hydro, demonstrate the area's attractiveness to large industries.

The trend will continue as more and more firms convert to new technology and grow to "megascale" proportions. Their new size leads to a demand for more space. While industries prefer to locate near their particular markets, the large sites needed are available only at some distance from presently developed areas. The

relatively undeveloped parts of southwestern Ontario, such as Haldimand and Norfolk, are the last remaining open areas within reasonable distance of the large Canadian and U.S. markets. They have the added attraction of excellent transportation facilities provided by lake, railways and highways.

These features, which attracted Ford, Dofasco, Stelco, Texaco and Hydro, will attract others. Whether to allow large-scale industrial growth to occur unhampered, or to place a ceiling on it, is a policy matter to be decided upon largely by the Provincial Government, though Federal policies may also have an influence. Whichever way the decision goes, it will greatly affect the Haldimand-Norfolk area in the long run.

As far as is known now, however, the future of Haldimand-Norfolk will depend very largely on Stelco. Its labour force will far exceed those of Texaco and Hydro combined. In fact, the timing and pace of large-scale urban growth in the two counties will reflect the timing and pace of Stelco's development. This plan, therefore, is based on the information currently available from Stelco as to its own intentions and expectations.

It should be stressed, too, that the projections in this plan assume that only about 25 percent of the industrial growth generated by Stelco will take place actually within Haldimand-Norfolk. It is assumed that the rest will occur elsewhere, mostly in southwestern Ontario.

Growth Prospects: The Problems

Population

The employment created directly and indirectly by Stelco will have an explosive impact on the present population of Haldimand-Norfolk. By the year 2000 it could easily have risen from its present 83,000 to 300,000. Stelco's employment alone by the end of the century could populate a city of 60,000 to 70,000. But major industry attracts suppliers and service industries. This accounts for the projected population of 300,000. The significance of the population increase lies not only in its size, but in the rate at which it will occur (5 percent annually) and in the

shift from rural to urban (80 percent urban).

Land

Large though the population growth will be, only a very small proportion of the land area of Haldimand-Norfolk will be required for urban development--1.4 percent in 1981, and 3.7 percent in 2001. Even at the highest estimate, urban and industrial land uses will account for less than 10 percent of the area's 718,000 acres by the end of the century. While some of the remaining land will be used for transportation, utilities, and recreation, most of it will remain in farming and forest. *The landscape generally will retain its rural open character.*

Municipal Costs

In the period of early development, 1981-1996, the pace and extent of urbanization will demand the rapid creation of an almost totally new urban infrastructure. The problem is not the *volume* of growth, which could be absorbed by a large urban area with little difficulty, but the *scale* of this growth compared to the present size and growth rate of the area's existing urban centres. They will experience difficulties in balancing their small tax bases against the financial burden of providing services to their new inhabitants. They will have, too, the additional complication of providing for an unusually young population. Demands for schools, larger-than-average dwellings, sports facilities, and the like, will be heavy.

Housing

The need for housing will increase every year until about 1996 when the rate of population increase will have dropped. By 1981 about 31,000 housing units will be occupied but between 1981 and 1996 some 60,000 more units will be needed.

Schools

By 1981 an additional 28 elementary schools will be required to accommodate 8,400 new pupils, and three secondary schools will be needed for 2,500 new secondary students.

Growth Prospects: Solutions

The Urban Hierarchy

Any settled area, from a township to a province, tends to develop its own urban focal point as its main supplier of services. It is a natural process in that it usually happens because providers and users of the services find it most convenient.

The scale of the centre and the level of services range from the hamlet with a general store to the metropolis with several large department stores and hundreds of specialized shops. Below a certain size, a town cannot supply many important urban services. Once a very large size is reached, continuing growth may provide only a small marginal increase in the level of services to offset growing disadvantages, but a city of this magnitude cannot yet be foreseen in Haldimand-Norfolk.

The New Town

The central planning problem in Haldimand-Norfolk is to accommodate a new urban population of about 250,000 by the end of this century. Until 1976, the additional population can be handled in the existing towns. By then, however, these towns will have reached the limits of their existing and proposed water supplies and sewage facilities.

The Study considered several approaches to the post-1976 problem. The most obvious, perhaps, is to continue distributing the population among the existing centres. This was rejected for two main reasons. First, the continuing rapid increase in the rate of population growth would soon start to create serious problems for them. Second, people working in Nanticoke would naturally gravitate to the nearby communities, such as Simcoe, Jarvis and Port Dover, in preference, for example, to Dunnville, Caledonia and Delhi.

The solution proposed is to develop a hierarchy of urban places which will comprise the existing towns together with a large new urban centre located near Nanticoke. For convenience, the new city is referred to as "Woodhouse New Town".

The site for the new town, which should be acquired by

the Provincial Government, consists of the lands bounded, roughly, by Highway 3, the Lynn River, and Black Creek. It has six major assets.

1. It can be integrated easily with transportation networks as they now exist and as they will develop.
2. It is close enough to Nanticoke for easy commuting, but far enough away to escape significant air pollution and other annoyances.
3. Water and sewerage can be readily supplied; it would not be dependent on a regional system of piped services.
4. Simcoe and Port Dover are close enough to provide community and social services in the early stages. The proximity of these existing towns will also reduce the risk of a company town character.
5. The locational advantages would produce strong development pressures in any case. Woodhouse New Town, therefore, will be encouraged to grow rapidly to a size suitable for a regional centre.
6. Potential for outdoor recreation is high, for Woodhouse New Town is bounded by the lakeshore and the Lynn and Black Creek valleys. Care must be taken to protect these assets from urban encroachment and water pollution.

There is one immediate problem. The CPR intends to extend a spur south-eastward from the Lake Erie and Northern line south of Simcoe to serve the Stelco site. As this would run directly across the proposed Woodhouse townsite, it is highly undesirable and should be firmly opposed. (This route has also aroused vigorous local opposition on several grounds.) The most satisfactory alternative for CPR seems to be a line from the LE&N northeast of Simcoe that would either allow CPR trains to use CNR tracks, or be continued to the Stelco site parallel to the existing CNR line.

An essential part of the Woodhouse New Town plan must be the protection of the lakeshore and the Lynn and Black Creek valleys. They will be of central importance to the city as recreation areas and conservation resources. Black Creek will form a natural buffer between the residential development and the industrial complex. These areas must be placed in public ownership as soon as possible.

Even though the restructuring of municipal government may eliminate the traditional need for an industrial tax base, Woodhouse New Town should be planned to include its own industrial areas to help diversify the economic base and employment opportunities. It should not be planned purely as a residential community.

The development of the New Town should start during the period 1976-1980. It should occur sufficiently early and sufficiently rapidly to give the city a population of about 6,000 by 1981. A thorough technical study will be needed to determine the precise timing and pace.

Though the Woodhouse proposal should not be thought of just as a real estate venture, dollar costs must be one of the factors in passing judgment on the desirability of the new town. The cost of townsite acquisition will probably be at least \$15 million. Two savings will emerge from the initial expenditure, however. First, the acquisition will ensure that the right site is developed and properly planned. This will result in long-term savings in the provision of services and avoid the need to acquire land for public purposes later, at a much higher cost. Second, although it is not the purpose of the recommendation, the expenditure will almost certainly prove a good long-term investment. The New Towns of the United Kingdom, for example, originally involved very high capital expenditures by the British government but they are now returning substantial dividends.

What the urban pattern of Haldimand-Norfolk will look like 50 or 100 years from now cannot be foreseen with any certainty. Urban growth and change in the area will necessarily reflect social and technological dynamism. The plan proposed here is designed, therefore, to avoid any attempt to predetermine the future urban system.

Urban and Residential Development: General

Existing Towns and Villages

The proposed strategy is not intended to build up an overwhelmingly dominant city at the expense of other communities. This would be thoroughly undesirable. *The objective is to maintain a balance between a strong centre and a set of equally healthy sub-centres providing more localized general service.*

The size to which existing centres can grow is limited by their water and sewage facilities. Some have already reached their capacities; others still have some limited potential for expansion. Continuing growth should occur at a moderate rate for towns and villages which are either well located to service local market areas or have other intrinsic potential for economic development. Their growth depends, however, on whether or not they can be serviced reasonably economically by a regional or subregional water supply and sewerage system.

Simcoe and Dunnville will have a particularly important role in absorbing new urban development in Haldimand-Norfolk, especially in the later 1970's before Woodhouse New Town is on its feet.

The hamlet of Nanticoke, on the other hand, is in a precarious position, virtually surrounded by potentially noxious industries. They will not only pollute the air, they will generate heavy traffic as well. The air pollution, noise and dust so created would make unpleasant surroundings for residential development. Also, the Air Management Branch of the Ministry of the Environment has recommended that no new urban residential development be permitted within a three-mile limit of the boundary of the Nanticoke industrial area. In these circumstances, it would be irresponsible of government, municipal or Provincial, to encourage further residential growth in the hamlet. Only such growth as is already permitted under municipal building and development controls should be allowed. Nanticoke, however, is the innocent victim of economic growth that will benefit all of Ontario. Special arrangements should be made by the Provincial Government to purchase, on request, any property placed on the market at terms that would protect the reasonable interests of the owner, with the ultimate aim of total public acquisition and conversion to other uses.

Local Industry

As a general policy, minor manufacturing industries are to be encouraged in order to diversify employment opportunities and to help offset the dominance of Stelco as an employer. They should be sited in or next to urban centres which can service them adequately, but with attention to their relationship to residential areas, traffic patterns and so on.

In view of contemporary industrial needs and the competition for industrial development, well planned and serviced industrial estates must be created in the larger communities. But first, a thorough study must be made to ensure that the investment can be justified and that the estates are designed for the needs of the industries likely to be attracted.

Services

Overall, water supplies and sewage treatment facilities in the two counties (operating, under construction or firmly planned in 1970) will handle an additional 21,000 people. This will meet urban growth needs only until about 1977.

Some small communities such as Langton, Selkirk and Fisherville lack communal water and sewage servicing altogether. Many cottage areas fall into this category as well. In Walpole Township, for example, where there are about 900 cottages on small lots, many septic tank and field tile systems are malfunctioning. Individual wells and roadside ditches are being polluted. The situation is aggravated by the conversion of some summer cottages into year-round dwellings.

To meet the water needs of communities in central Haldimand-Norfolk--Caledonia, Cayuga, Hagersville, Jarvis, and eventually Port Dover and Woodhouse New Town--the Ministry of the Environment has proposed the construction of a trunk pipeline extending north from Lake Erie. This could perhaps service Brantford and Kitchener-Waterloo as well. Ontario Hydro has already agreed to incorporate sufficient capacity into its second water intake at the Nanticoke Generating Station to meet projected municipal and industrial water demands as well as its own needs. A site for the proposed water purification plant has been acquired.

The Ministry of the Environment has carried out long-range feasibility studies also on the possible disposal of sewage from Hagersville, Jarvis, Stelco, the Stelco industrial park and Woodhouse New Town. A system of trunk sewers carrying sewage to a treatment plant or plants on Lake Erie seems the most satisfactory solution. This system would probably never serve Cayuga, Caledonia or Dunnville, but it might eventually include Simcoe and Waterford.

Because of the limited capacities in existing towns and

the heavy demands soon to arise, the regional servicing system must be in operation during the period 1976-1980.

Rural Non-farm Development

Development in Haldimand-Norfolk in the next ten years will not be confined to urban areas alone. Some 5,000 people will be added to the rural non-farm population. They will be accommodated in rural areas, small settlements, or converted summer cottages.

Housing lots in rural areas are usually created by severance--a form of land division which separates part of a farm from the main body. Under existing municipal financing arrangements, and without any positive land use policy, severance can and often does lead to poor planning, servicing problems, and financial difficulties for rural townships. The practice of carving haphazard parcels out of farms ought to be severely discouraged pending a thorough review of the situation.

On the other hand, severances will help provide some elbow-room in a very tight housing market over the next few years. Some people genuinely wish to have a country home. They should not be denied the opportunity so long as they are prepared to pay the price. Moreover, in parts of the two counties, notably within the proposed green belt areas, the "country estate" will be entirely appropriate, in principle, for land use policy, given proper local planning.

"Rurban sprawl"--the spread of subdivisions across the countryside--is another type of development that must be discouraged. No important community and service facilities or industries should be established where they will tend to stimulate it.

Cottages

Haldimand and Norfolk have a high proportion of seasonal dwellings. Turkey Point, for example, has some 700, 200 of which are occupied year-round. With no sewers and only an inadequate private piped water system, there is already a serious threat of health problems.

Many cottage "communities" are within close commuting

distance of Nanticoke and some cottages are occupied all year, evidence of the tight housing market. While most cottages are well enough built and serviced for summer and weekend use, few are suitable for permanent occupancy. The Medical Officer of Health regards most of these concentrations as being below satisfactory sanitary standards; few buildings have safe heating systems or adequate insulation for winter.

At the moment, the best policy appears to be "holding the line". Year-round occupancy should be stabilized at its present level and the further development of cottages discouraged until firm and positive new policies are developed. A thorough survey of all existing seasonal dwellings is needed to determine numbers, location, type and condition of construction, sanitary condition, and occupancy. Meanwhile, a heightened public and municipal awareness of the implications of conversion is badly needed.

Major Manufacturing and Extractive Industry

Major Manufacturing: Implications

From the viewpoint of their impact on their surroundings, major industries can be seen as two distinct types. One, the "high growth impact" industry, employs many workers and thus significantly affects population and transportation. The other, the "high environmental impact" industry, affects its surroundings by, for example, generating air pollution, noise or heavy traffic. The distinction is not always clearcut, for many characteristics of one are often found in the other as well.

Major Manufacturing: Policy

Two separate land use policies are required to deal with the two types of industry. Pending the formulation of an overall Provincial policy, a ceiling should be placed on high growth impact industrial development in Haldimand-Norfolk. High environmental impact industries should be placed where their effects can be minimized. In the former case, land availability should be limited, whereas in the latter, the control of location is the important point.

The Nanticoke industrial area is suited to both types of industry. It is well related to the regional transportation system and separated from all but very small existing communities like Nanticoke (see page 8). Except for the beaches and cottages on the lakeshore nearby, it is also well away from key natural and recreational resources. To maintain this separation, future industrial expansion should be to the east rather than the west or north.

Neither type of industry should be allowed to locate anywhere else in Haldimand-Norfolk unless and until they are clearly appropriate in the context of Provincial policies. Even then, the location of high environmental impact industries should be preceded by a careful investigation of their possible effects on the environment. It would, in fact, be desirable to exclude all new megascale industries until their impact can be assessed in relation to Provincial regional development policies.

If other megascale industries are deemed acceptable, they should be confined to sites in the Nanticoke area only. This is not an unduly restrictive limit. There are seven sites in the Nanticoke area which are suitable for either or both types. Altogether they comprise about 11,000 acres, an area which could employ about 95,000 workers at today's employment densities. This 11,000 acres is comparable, for example, to 60 percent of the developed industrial land in the Metropolitan Toronto Planning Area (1968).

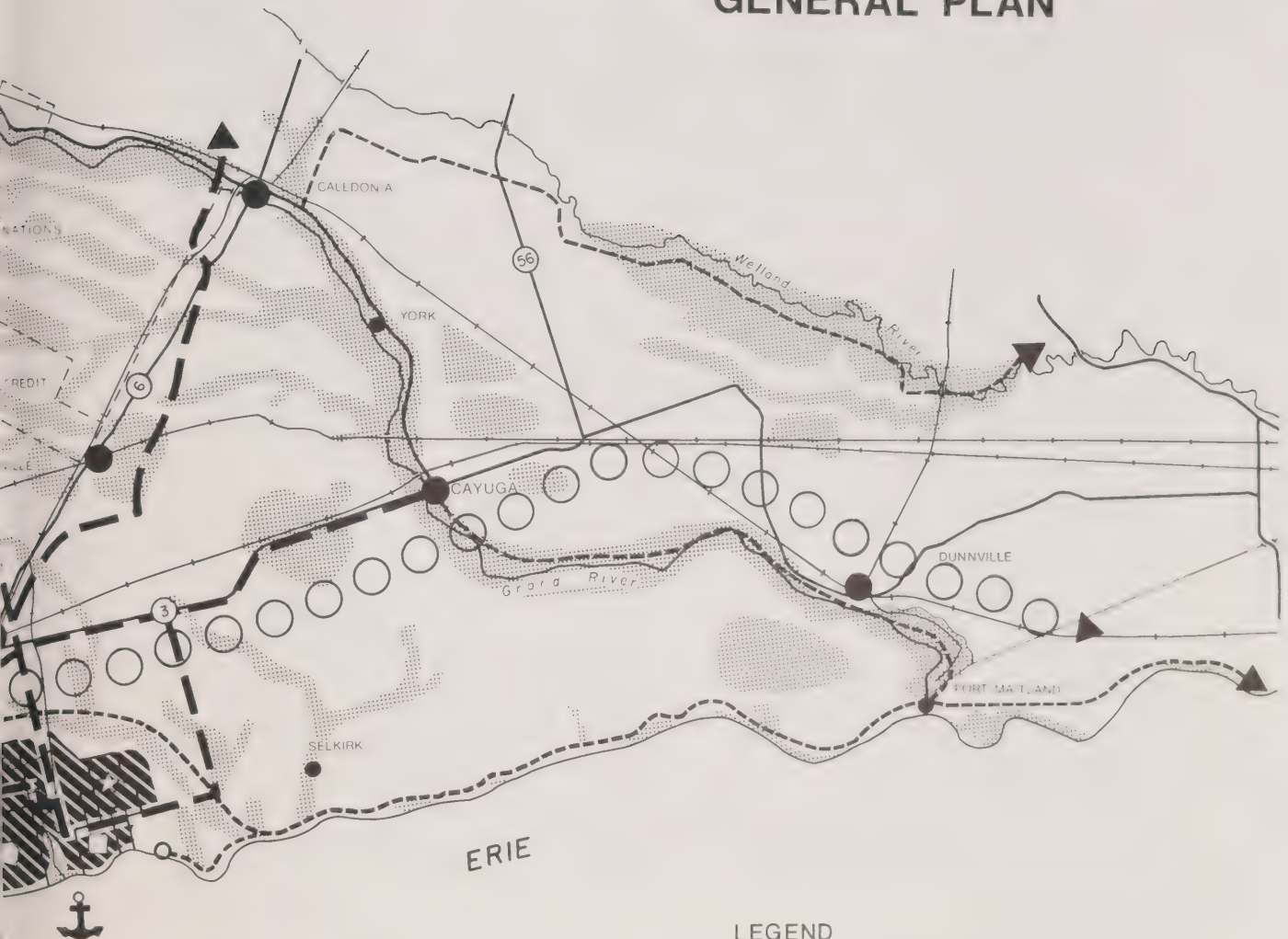
Controlling the location of industrial development has implications for zoning policies. If all the land in the Nanticoke area were actually zoned for industrial use, all effective public control would be lost; development could take place at any time. The great fault of overzoning is that it creates uncertainty in the whole region by signing a blank cheque for development. The solution is not to increase the amount of land presently zoned for industrial use (except for the Hydro site), but to designate part of it on the official plans for industrial development and the rest as industrial reserves.

One other factor to keep in mind is the Air Management Branch's recommended three-mile buffer zone. It should be enforced by official plan designation and zoning. As this may cause some hardship to landowners in the zone, a study should be undertaken to determine how much hardship, if any, and what compensatory measures might be taken.

THIS MAP SHOULD BE READ AND INTERPRETED
IN RELATION TO THE TEXT OF THE REPORT



HALDIMAND-NORFOLK STUDY GENERAL PLAN



LEGEND

Existing Town or Village



Green Belt and Major Recreation Area



Major Urban Development-Initial



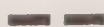
Nanticoke Industrial Area



Resort / Recreation Centre



Major Road



Future Freeway (Schematic Only)



Parkway System



Airport



Harbour Study



Expressway



Main Road



Railway



Stelco (steel mill)



Ont. Hydro (generating station)



Texaco (refinery)



Extractive Industry

Ninety percent of Canada's gypsum, and all of Ontario's, is produced in Haldimand County. It is a major contributor to the county's economy but will become even more valuable as a ready supply of construction material during the future growth of the area.

Minerals can be extracted only from sites where their extraction is economical. High transportation costs are a further limiting condition. Yet quarries and gravel pits situated next to urban areas are undesirable from an environmental point of view. They create air pollution, noise and heavy truck traffic, and they despoil the natural landscape. For these reasons, they are equally undesirable in or near recreation areas. Generally, in Haldimand-Norfolk, new extractive industries should be prevented from locating near present and prospective urban areas, and in areas of special landscape value.

Service Corridors and Transportation

With urban and industrial expansion Haldimand-Norfolk will need improved communications with its surrounding area and markets. The two counties lie astride the shortest route between the industrial giants of Detroit and the northeastern United States. With the advent of Stelco, improved connections will be required with Hamilton to the northeast, as well.

Service Corridors

Linear services must be provided with as little disruption of the landscape, urban and rural, as possible. One method is the service corridor which might include a number of services--highways, transmission lines, railways, telephone cables--in a single relatively narrow strip of land, or even in a common right-of-way.

Preliminary studies, however, suggest that the corridor principle may be practicable only to a limited extent in the east-west path parallel to the Lake Erie shore. Pending further study, therefore, a corridor is not at present recommended for this path. But the planning and acquisition of service rights-of-way should take into account areas which are or may be urbanized or are

of strategic natural importance.

Between the Nanticoke and Hamilton areas, however, the corridor principle is entirely suitable. The existing pattern of urban areas in this stretch, together with other factors, does not leave much leeway for alternative routes. Also, needs for new rights-of-way will arise fairly regularly as growth proceeds. The service corridor, therefore, is the most reasonable approach. Land should be reserved along this corridor to provide for rights-of-way as they are needed.

To conserve land and to minimize the adverse effects on urban development, agriculture and the natural environment, all plans for constructing linear services in Haldimand-Norfolk should be required to pass through a "clearing house" for coordination (see page 25).

Transportation: Study and Plan

Stelco came to Nanticoke largely because of the availability of lake transport and other modes of transportation to serve its needs. Texaco and Hydro were influenced by the same advantages. The new industries are, in turn, causing new railways and roads to be built. Eventually, transportation needs generated both within and outside Haldimand-Norfolk will produce an entirely new transportation system. It will probably take the form of a new freeway network, but may be a new mode of high-speed transportation. This, in its turn, will have a new impact on land use and development.

However, if the general public interest is to be served, rather than just the narrow interests of industrial transportation, the basic goal of transportation planning must be the movement of people and goods *in a way that will help achieve land use and development objectives*. This theme underlies all proposals relating to transportation in this report.

The Ministry of Transportation and Communications is now carrying out a comprehensive, long-range transportation study involving Haldimand-Norfolk and adjacent areas (the Niagara-Lake Erie Transportation Study). On the basis of this study, a comprehensive transportation plan should be prepared and regularly revised. The plan should provide for the transportation of both people and goods by land, air and water. Then, based

on the plan, a phased programme of improvements to the present transportation system should be devised. This programme should include also the protection of rights-of-way (or corridors) for long-range needs. Provision should be made in the plan for transportation-related development sites, such as highway service centres and switchyards.

Roads

For some time, Highway 3 will remain the main east-west road through Haldimand-Norfolk. It will have to accommodate greatly increased traffic volumes. Bypasses will be needed around Simcoe and Jarvis, and widening will have to be undertaken in some areas. A bypass south of Delhi may also prove necessary.

Eventually Highway 3 will almost certainly have to be replaced by a freeway (or an equivalent). The best route for the new freeway runs approximately parallel to the present highway. Of the three possibilities considered by the Study, this is the route that would provide the most effective service to existing towns, to Woodhouse New Town and its possible extensions, and to Nanticoke, and that would have the least environmental impact. Its precise alignment will have to be planned in detail taking into account Woodhouse New Town and its possible northward extension, other communities, and natural features along the route.

A limited access highway will also have to be built eventually from Hamilton to the Woodhouse-Nanticoke area. It should be planned along the following route: crossing the Grand River west of Caledonia, following the new Hydro transmission line to Highway 3 east of Jarvis (skirting Hagersville well to the east to permit the town to grow), then following Haldimand County Road 3 to Haldimand County Road 11.

For the Woodhouse-Nanticoke area itself the proposed road pattern is basically a grid consisting of Highway 3 and a parallel route to the south, linked by north-south roads, mainly already in existence but including one new road.

A Regional Airport

With good ground transportation to Hamilton's Mount Hope airport, the Woodhouse-Nanticoke area could be served by this facility. But eventually a new regional

airport is likely to be required. The most suitable location for it is west or southwest of Hagersville. Either site would be fairly close to the Woodhouse-Nanticoke area and well related to the proposed surface transportation system.

Port Facilities

Both Stelco and Hydro will be heavily dependent on lake shipping. Both are constructing their own dock facilities. The proliferation of private ports may not be necessary or even beneficial. It might be preferable to construct a public harbour to serve any new industries. If a public harbour were built, it could be used to move goods across Lake Erie and then overland to Hamilton and Toronto (bypassing the busy Welland Canal). It could also accommodate passenger service by ferry or hovercraft. Special studies, however, will be required to determine if there is need for such a harbour and, if so, its location and uses.

Agriculture and Forestry

Agriculture

As already pointed out, only a very small proportion of the land area of Haldimand and Norfolk will be required for urban development and related uses. Most of the land will remain in farming. Haphazard conversion of agricultural land to other uses, therefore, should be carefully controlled. This is not such a hardship to the farmer as it may first appear. Most farmers would not be able to sell their land to developers or speculators in any case; but all would benefit from greater certainty about the future and from the prevention of inflated land values.

The present agricultural economies of the two counties differ markedly from one another. Most of Haldimand's land is clay loams, graded mainly as class 2 (good with certain limitations), whereas Norfolk's is sandy and mainly graded class 4 (poor).

Paradoxically, Norfolk's long-term agricultural prospects are the brighter of the two. The introduction of tobacco growing in the 1920's has made the county prosperous. Even if anti-smoking campaigns cut down

the market for tobacco, Norfolk's land can be converted to a number of other profitable agricultural enterprises.

Haldimand is not so fortunate. Although the soil is good, expensive drainage measures are needed for the land to realize its full potential. Holdings are often small and farm income is too low to permit farmers to make the necessary capital investments. Dairy farmers are in much the same position, with many smaller farms going out of business in spite of increased production for the area generally. Haldimand's agriculture has potential for profitable diversification into different field crops, beef ranching, vegetable gardening, and hog production. But success depends on investment capital (especially for drainage), rationalization of the industry, and improved management practices.

The maintenance of a viable agricultural industry in Haldimand-Norfolk is essential because there is no practical alternative use for most of the land in the foreseeable future. The large capital investments needed to keep farming viable may call for new forms of farm financing by the Provincial Government. This may call for special Provincial assistance to improve agricultural efficiency. It is preferable to help farms remain in production, however, than to allow the land to lie derelict. Sound land use policies, not only direct return on investment, must be an important consideration in determining the extent of public financial support to agriculture.

Forestry

For some parts of Haldimand-Norfolk forestry may be a more appropriate use for the land than farming. There are areas in the two counties that have a high potential for timber production, including high-value hardwood (walnut and oak).

Forest lands are also important as wildlife habitat. With proper forest management, the commercial and natural uses of the forest need not conflict.

Permanent maintenance and some extension of forest areas should be a basic planning policy. Three categories of forest management are recommended: multiple use (including conservation, recreation, and lumbering); management specifically for the production of high-value timber (mainly walnut) in limited areas; and maintenance of forest areas of special ecological interest.

Recreation

Needs

Some five million people live in cities within two hours' drive of Haldimand-Norfolk. By the end of the century there could be twice this number. With more leisure time, higher disposable incomes and greater mobility, the demands on outdoor recreation facilities will increase even more rapidly than the population.

The attractive, but limited, natural recreation resources of Haldimand-Norfolk will experience unprecedented pressures. The Lake Erie beaches will help fill a vital need for intensive recreation but many of the large inland recreation areas--the Grand River valley, for example--can accommodate only lower intensity uses. In addition, tracts of land, even though they have no special natural characteristics, will have to be set aside for intensive or active recreational use specifically for the growing urban population of Haldimand-Norfolk and nearby cities.

Open Space for Recreation

To provide for the open space recreation needs of Haldimand-Norfolk, all its outstanding natural recreation resources must be preserved, protected and wisely managed.

Competition for the use of the lakeshore is already becoming acute. Industry, cottages, and public recreation jostle for space. Careful planning and integration of lakeshore neighbours is crucial so that they may be arranged to the greatest possible benefit of all users. Ultimately, beach areas with high recreational potential should come under public ownership and strip cottage development should be regrouped into planned, serviced cottage communities. In general, the beaches and the lands behind them should be considered a public recreational resource, not a private preserve.

As mentioned above, additional lands will have to be acquired and developed, even if they have no outstanding natural amenities, just to provide enough space and facilities for picnic grounds, ski slopes, sports fields, and the like. Some of these may be located within urban areas, others outside.

Urban Recreational Centres

At least two of the lakeshore towns are potentially important recreational centres. With carefully planned redevelopment and new development, Port Dover could and should be a major resort in the future. Expanded facilities--marinas, convention hotels overlooking the water, varied entertainment facilities and active recreation areas on the high ground east of the town--all would harmonize very satisfactorily with the picturesque fishing boats and drying nets that now characterize the scene.

Port Rowan, too, should have an important recreational role, though of a different sort. Emphasis here should be on services to sports fishermen, picnickers, tourists, pleasure boaters, hunters, and amateur naturalists, and also on its attractions as a retirement community.

The Parkway System

Since "Sunday driving" and automobile vacationing are very large features of the recreational scene--in fact, enjoyed by more people than any other outdoor recreation activity--a system of scenic routes and parkways should be developed in Haldimand-Norfolk. The basic pattern should follow the lakeshore, Big Creek and Whiteman Creek, and the Grand River. Most of it could well consist of existing roads, such as Highway 54 and Haldimand County Road 17 along the Grand.

Historic Sites and Buildings

Haldimand and Norfolk bear the stamp of much of eastern Canada's early history. The French explorers, the United Empire Loyalists, the War of 1812, all have left their mark. From 1815 to 1825 the hamlet of Vittoria was the administrative and judicial centre of the London District--the "capital" of most of southern Ontario west of Toronto.

In town and countryside, a number of old buildings survive. A central objective of planning policy should be to preserve them as the surviving physical heritage of a history of which much evidence has already been lost. Where buildings of historic significance cannot be retained on their original sites, they should be removed and reconstructed elsewhere, perhaps in Woodhouse New Town itself. To complement the preservation of surviving

old buildings, reconstruction and reproduction of some of the lost landmarks of local history should be undertaken; for example, an Iroquois village comparable to Midland's Huron village, Fort Norfolk to match Fort Niagara.

Recreational Uses of Industrial Waste

Stelco and Hydro will produce masses of solid waste; fill will result from the excavation at Woodhouse New Town; Hydro will discharge heated water from its cooling system. Some of this material may possibly be useful for recreational purposes. An artificial ski hill could be built from the solid wastes and fill. It is conceivable that an artificial lagoon could be fed by Hydro's heated water. A lagoon would not only provide warm water for swimming, water sports and fishing, but would protect living organisms in the lake from the effects of increased temperatures.

The practicability of such schemes is unknown but their potential benefits warrant further examination.

Environmental Protection*

Certain general policies, principles and objectives relating to the natural environment should be accepted as fundamental to all future planning in Haldimand-Norfolk.

The principal objective of this plan is to maintain a balanced system or "environmental homeostasis"--the stable relationship of living organisms to each other and to their physical base. This does not mean necessarily the adamant preservation of every animal, fish and tree. It does mean, however, the careful integration of wildlife conservation, forestry, water management, agriculture, recreational uses and urban

*One of the background studies of this report was a comprehensive environmental study of the area: Victor Chanasyk and Associates. *The Haldimand-Norfolk Environmental Appraisal*, 1970. Many of the recommendations in the planning report are based on the recommendations of the Chanasyk Report.

and industrial development so that the essential balance of nature is maintained.

Haldimand and Norfolk are unusually rich in natural and manmade features of great ecological, recreational, historic and aesthetic value. The Lake Erie beaches, Long Point, the lower Grand River and the hamlet of Vittoria are only some examples. These should be permanently preserved, and where necessary improved and enhanced.

The Green Belts

Permanent green belts should be retained between major urban areas. They need not be purely recreation areas; they may include farmland, cottage and "country estate" areas, small communities, conservation areas, and so on. Their purpose would be to prevent the continuous spread of large cities, and to enable city-dwellers to gain ready access to open countryside. They would also provide space for a variety of uses consistent with a generally green and open landscape.

The Grand River is the natural core of a green belt separating the Woodhouse-Nanticoke area from Hamilton and the St. Catharines-Niagara Falls-Welland-Port Colborne complex.

A more extensive permanent green belt is recommended west of Highway 24, comprising the wedge formed by the Big Creek and Otter Creek valleys. This might be extended north to separate Kitchener-Waterloo from the rapidly expanding "London-centred" region.

The recommended policy for the green belts is similar to that proposed for "Zone II" in *Design for Development: The Toronto-Centred Region*: "...to retain (them) to the maximum degree in recreational, agricultural and other open space uses" (page 20).

The Lakeshore

Competition between industry and recreation for use of the lakeshore is already severe. The Stelco, Texaco and Hydro sites are situated right on the shoreline. To protect the natural and recreational assets of the lakeshore, no future installations should be permitted to extend their property to the lake except to the minimum degree essential for water access.

Erosion presents another threat to the shore. Total prevention is probably impracticable and would, in any case, be disastrous to both Long Point and the beaches.

A detailed study should be undertaken of the Lake Erie shoreline to determine how best to reconcile recreational and industrial uses, and how to control erosion without creating damage elsewhere.

Extractive Industries

The operation of pits and quarries in the Haldimand-Norfolk area requires strict control. The regulations which came into effect at the beginning of 1972 to control such operations on the Niagara Escarpment should be extended to cover Haldimand-Norfolk. The regulations require a permit fee for operation, the posting of a security bond against the rehabilitation of the site, and the filing of a site plan showing present and final topography and existing buildings. They also stipulate screening requirements and the setback distances from roads and other properties. Public notice of intent to open a new pit or quarry is also required. In the words of the Mineral Resources Committee, which recommended similar controls, these restrictions would serve "to minimize the ugly scarring of the Ontario countryside".*

Linear Services

Linear services which must pass through green belts and recreation areas should be carefully planned and designed to be as unobtrusive as possible.

Long Point

Long Point is the most remarkable natural phenomenon in Haldimand-Norfolk, and possibly in Ontario. It is a twenty-mile-long sandspit built up from the erosion of the sandy shoreline to the west and has become a unique natural ecological museum of incalculable value to the

*Report of The Mineral Resources Committee to the Minister of Mines, 1966. pp. 10-11.

scientist and amateur naturalist. But it is also very fragile; any substantial human intrusion would not merely disrupt the ecosystem but literally destroy the Point by removing the grass cover which holds the sand. Visible damage has resulted even from the present very restricted human use.

Long Point has been owned since the 19th century by a private company which has deliberately protected its natural character. If either the ownership or the management policy should change, however, the Point should be immediately acquired as a regional, provincial or national nature reserve. In no circumstances should it become an unrestricted public park despite its twenty miles of fine beach.

The Woodhouse New Town Area

The parts of the lakeshore, and the Lynn and Black Creek valleys, which will be vital to Woodhouse New Town's wellbeing, should be placed in public ownership as soon as possible and protected as strategic multiple-use areas.

Air Pollution

To minimize the adverse effects of air pollution, new urban residential development should not be allowed within a three-mile zone around the Nanticoke complex. Any new industries with a high pollution potential should be located where they will do the least damage to important natural or urban areas.

Implementing the Plan

The Machinery

This plan, once adopted, will provide the framework for future policies at the local as well as Provincial level. Until a new local government structure comes into effect, however, and even after, implementing this plan will be chiefly the responsibility of the Ontario Government. The Government is directly responsible for the main instruments of development, such as highways and regional piped services, and has considerable influence over private land development. Also the

municipalities will be quite unable to finance the capital expenditures required.

The first essential in implementing the plan is for the Provincial Government to formally adopt as policy the key recommendations. Responsibility for carrying out the recommendations will then rest with the appropriate departments.

Because of the pace and scale of change, and the importance of the Provincial role in Haldimand-Norfolk, local planning will have to be strong and centralized. At this stage the future form of local government for Haldimand-Norfolk has not been determined but, whatever it is to be, diffusion of responsibility through a "two-tier" planning structure would be most undesirable.

An added factor in planning for Haldimand-Norfolk is the role of the Federal Government. Although local planning is a provincial matter, the Federal Government controls many aspects of development and planning: for example, airports, harbours, railways, national parks, and cost-sharing of land assembly and urban renewal programmes.

The formation of three new agencies would be highly desirable for the effective implementation of the plan.

1. The Woodhouse New Town Corporation

The planning and development of Woodhouse New Town should be the responsibility of a Crown Corporation established and funded by the Province. The Corporation should be empowered to prepare a detailed development plan for the townsite; acquire, hold and use land and money for urban development, recreation, and public facilities; develop, or administer the development of, publicly owned land; and engage staff and consultants. It is not the intention of this recommendation that the development be carried out by the Development Corporation, but largely by private enterprise.

Initially the Development Corporation might comprise members appointed by the Lieutenant-Governor-in-Council specifically for their administrative or professional experience, together with municipal and (if the Federal Government should participate in the project) Federal representatives. As time goes on residents of the new community should be directly represented on the Corporation. Provision should be made for these representatives to be added progressively, to a set maximum, as the population grows.

2. *The Committee to Coordinate Linear Services*

This is the "clearing house" mentioned earlier. It would be responsible for the coordination of all new service rights-of-way in Haldimand-Norfolk; but its jurisdiction would necessarily extend over a wider area.

3. *The Environmental Management Committee*

An interdepartmental agency, this committee should be constituted essentially to pursue the recommendations of the Chanasyk Report (*The Haldimand-Norfolk Environmental Appraisal*, 1970). It is important that this committee be composed of senior members of the relevant departments in order to coordinate effectively the work of their departments.

Interim Measures

Neither Haldimand-Norfolk nor the Province can afford an indefinite hiatus in the planning programme. The new local government structure (the report on which is due in 1972) will not be constituted early enough to take over planning for the immediate future. Some kind of interim arrangement must be made to ensure that no gap occurs.

There are two aspects to the continuation of the planning process which must begin almost immediately. The first aspect is to ensure that the plan as adopted is put into effect. Inadequate communication, insufficient coordination, misunderstanding, could all conspire to thwart the plan.

1. *The Coordinator*

The best safeguard against this kind of problem is the appointment by the Provincial Government of a "watchdog" or coordinator. His business will be specifically to ensure that the necessary programmes are in fact initiated and carried through. He would also be responsible for reporting progress periodically to all concerned.

The need for coordination cannot be overemphasized. Not only will the activities of several government departments have to be meshed but also those of inter-departmental committees, a Development Corporation and

thirty local and county municipalities. Even after the new local government structure comes into effect this coordinating function will be needed because most of the agencies concerned are Provincial rather than municipal.

Two other important functions should be performed by the coordinator. He should monitor the changing situation continuously to anticipate needs and initiate the programmes to meet them. He should also serve as a channel of communication between the Government and the people.

2. The Planning Service

The second aspect of the continuing planning process is the extension and review of the plan itself. The plan presented here is no more than a first step. Changes will be needed from time to time to keep it up to date.

The planning of the Woodhouse townsite and the overseeing of planning regionally will be better managed by two separate bodies. The Development Corporation has already been discussed. To oversee the planning and coordination of events in Haldimand-Norfolk generally the best approach would probably be to establish a temporary "Haldimand-Norfolk Planning Service", coupled with the appointment of the coordinator mentioned above.

Costs

What will it cost? No plan can be considered realistic unless some attention is given to its financial implications. But most of the expenditures which this report implies would be incurred anyway; and planned spending is usually more effective than unplanned spending. The real question is one of comparative costs. At present, there is no accurate way of estimating the comparative advantages and costs of development with or without the plan. It is reasonable to suppose, however, that the costs will be less and the advantages greater if the plan is followed.

The general level of public capital expenditure is going to be very high for a long time to come. The present municipal tax base is very small. Without assistance the local municipalities will not be able to provide adequate local services. Therefore, to

ensure future growth, special Provincial assistance will be needed in the form of grants, loans and cost-sharing arrangements. Some direct assumption of municipal costs may also be necessary. Because of the magnitude of the costs, a long-range capital needs forecast should be prepared immediately.

The costs of change in Haldimand-Norfolk will be high, but they will arise from *growth*, not from the plan. The issue is not one of planning or the cost of planning; it is a question of whether or not adequate services are to be provided and, if so, from which public purse the money is to come.

